

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1-6. (Canceled)

7. (Previously Presented) A network station manager for a cable modem network station, comprising:

a management task component configured to initialize the network station and to maintain connectivity of the network station with a cable network, the management task component comprising a state machine configured to communicate with a plurality of task components; and

a centralized error handling state and peripheral states comprising an initialization state, a start dynamic-host-configuration protocol state, a configuration-download state, a start simple-network-management protocol state, and an operational state, the operational state configured to monitor for error messages and other messages communicated from other states and to communicate the error messages to the centralized error handling state and to send request messages to an Operational Support System Interface (OSSI) management task.

8. (Original) The network station manager of claim 7 wherein the OSSI management task comprises a start software upgrade task configured to respond to a software upgrade message and initiate upgrading of software.

9. (Original) The network station manager of claim 7 wherein the error handling state is configured to receive a reported error detected in one or more of the states, to request error event logging from the OSSI management task, and to initiate error recovery, and, when error recovery is not possible, to enter a dead state.

10. (Original) The network station manager of claim 7, further comprising an initialization state configured to initialize an Internet Protocol (IP) stack.

11. (Original) The network station manager of claim 10 wherein the initialization state further configured to initialize a bridge component to enable communication between the IP stack and a media access control component.

12. (Original) The network station manager of claim 7, further comprising a start dynamic-host-configuration protocol state configured to initiate creation and commencement of a dynamic-host-configuration protocol task.

13. (Original) The network station manager of claim 7, further comprising a configuration-download state configured to start a configuration-download task.

14. (Original) The network station manager of claim 7 wherein the start simple-network-management protocol state is configured to start a simple-network-management protocol task.

15. (Original) The network station manager of claim 7, further comprising a change upstream-or-downstream-channel state configured to change an initial upstream channel identification to match a predetermined channel identification.

16. (Original) The network station manager of claim 7, further comprising a start time-of-day state configured to initiate the creation and commencement of a time-of-day task component.

17. (Original) The network station manager of claim 16 wherein the time-of-day task component is configured to run in parallel with the management task component and periodically update the network time local to the management task component.

18-50. (Canceled)

51. (Currently Amended) A method of administering a broadband, cable modem network station for connectivity to a network, the method comprising:

implementing an administration method internal to a cable modem, comprising:

initializing the network station to a predetermined set of parameters including a centralized error handling state and peripheral states, which include an initialization state;

creating and starting a dynamic-host-configuration protocol task;

creating and starting a time-of-day task;

creating and starting a configuration download task;

creating and starting a simple-network-management protocol task;

entering an operational state upon successful initialization of the network station and connectivity with the network, and, while in the operational state, monitoring the tasks for messages, including error messages and task messages;

receiving error messages and initiating error recovery in the centralized error handling state in response to the error messages; and

receiving request messages and sending request messages to a request message management task.

52. (Original) The method of claim 51 wherein starting the dynamic-host-configuration protocol task comprises receiving one or more of the following:

an IP address from a dynamic-host-configuration protocol server, an IP address of a time-of-day server, an IP address of a trivial-file-transfer protocol server, an IP address of a SYSLOG server.

53. (Original) The method of claim 51 wherein the creating and starting the time-of-day task comprises:

obtaining time-of-day from a time-of-day server; and

continuously updating the time-of-day task to update local time in the network station.

54. (Original) The method of claim 51 wherein the creating and starting the configuration-download task comprises downloading a network station configuration file through a trivial-file-transfer protocol task; and

sending a completion message when the configuration-download task is finished and otherwise sending an error message.

55. (Original) The method of claim 54, further comprising receiving a change upstream-or-downstream-channel message;

changing the upstream or downstream channel identification to match a channel identification in the change upstream-or-downstream-channel message; and

sending request messages to a message management task.

56. (Original) The method of claim 51 wherein the creating and starting the simple-network-management protocol task comprises establishing connectivity with simple-network-management managers.

57. (Original) The method of claim 51, further comprising:

receiving a software upgrade message;

starting a software upgrade task to upgrade software in accordance with the message; and

reinitializing the network station upon completion of the software upgrade.

58. (Original) The method of claim 57 wherein starting the software upgrade task comprises communicating with an operation support-system-interface management task to start the software upgrade task.

59. (Original) The method of claim 51 wherein initiating the network station further comprises creating an operation support-system-interface management task.